

On page 4, the paragraph beginning at line 17 has been amended as follows:

A3
The magnetic resonance antenna has two connections 7, which, offset by 90°, are arranged at the outer connecting element 6. At these two connections 7, two currents that are phase-shifted by 90° can be alternatively coupled in or coupled out with a magnetic resonance frequency f . As a result, a circularly polarized magnetic field can be alternatively emitted or received with the magnetic resonance antenna according to Figure 1. The magnetic resonance frequency usually lies between 8 MHz and 100 MHz. The currents and magnetic fields that flow at a specific point in time are indicated in Figure 1 by means of the normal symbols.

IN THE CLAIMS

Claim 1 has been amended as follows:

- Sub 1
OK Cont.
1. (Amended) A nuclear magnetic resonance antenna comprising:
a plurality of antenna elements, each antenna having an element beginning and an element end;
said antenna elements being disposed radially relative to a center axis so as to proceed outwardly from the respective element beginnings to the respective element ends and exhibiting cyclical symmetry from antenna element to antenna element;
said antenna elements being at least magnetically coupled with each other; and
said plurality being at least five.